



the power of being global

Rev.1

AES	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 1 of 8	Rev.1
		Procedure No:	
Title: CHS DUST SUPPRESSION SYSTEM			MDII-OPN-SOP-
Issue Date: 31/10/2019			

STANDARD OPERATING PROCEDURE

CHS DUST SUPPRESSION SYSTEM

MDPCL-OMH-SOP-01-005

Date Approved: 31/10/2019	Approved by Team Leader: Duong Thuc Son <i>BD.Th</i>
Date Approved:	Approved by Operation Manager: Sid Phan <i>Sid</i>

Revision No.	Description	Revision Date	Prepared by	1st Reviewed by	2nd Reviewed by
0	First Issue	15-Oct-2018	Nguyen Thi Phuong		
1	First revise	22-Oct-2019	Bau Trung Hung	Doan Van Lieu	Nguyen Van Tan

REVISION HISTORY

No.	Date of revision	Description of change	Reviewed by	Approved by
0				
1				



the power of being global

AES	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 2 of 8 Procedure No: MDII-OPN-SOP-
Title: CHS DUST SUPPRESSION SYSTEM	Issue Date: 31/10/2019	

1. PURPOSE AND SCOPE

The purpose of this document is to provide a systematic guideline to operating the Dust Suppression system.

The dust suppression system covers the water spray for:

- Coal storage pile.
- Conveying transfer point.
- Water washing system for each floor in Transfer tower TT-01, 02, 03 and 04.

2. DEFINITION AND ABBREVIATIONS

PLC	Programmable Logic Controller
I/O	Input/ Output
HMI	Human/ Machine Interface
CHCR	Coal handling control room
P&ID	Piping and Instrument Diagram
TT	Transfer Tower
PS	Pressure Switch
CV	Conveyor

3. PRECAUTION

Job	Hazard	How to Eliminate Hazard
-----	--------	-------------------------



the power of being global

AES	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 3 of 8	Rev.1
		Procedure No: MDII-OPN-SOP-	
Title: CHS DUST SUPPRESSION SYSTEM		Issue Date: 31/10/2019	

Electric system of coal pile spray pump inspection	Electric shock cause leak water from line pipe or valves is broken	Use PPE is proper Check daily line pipe, valves and coal pile spray pumps status.
Operation of system	Leak water from line pipe or valves is broken or open/close valves status is wrong.	Check daily line pipe and valves status following design drawing specification

4. PROCEDURE INSTRUCTIONS

ACTIVITY/TASK	ACTION	RESPONSIBLE	REMARK
I. CHECKING			
1. Daily Inspection	1. Check lamps on the control panel. 2. Check coal pile spray pumps.	Operator	
The maintenance personnel shall inspect the system	3. Check switches and controls on the control panel. 4. Check power state of control panel.	Operator	
	5. Check essential devices for damage, trouble, or fault. 6. Check distribution piping for damage or corrosion.	Operator	
	7. Check start/stop switch of the pump to make sure it is operational.	Operator	
	8. Check gauge pressures of pump	Operator	
	9. Check installed state of devices within the flow control box.	Operator	
	10. Check solenoid valves and nozzles for damage, operability, or obstruction.	Operator	
	11. Check state of auto/manual switch.	Operator	
	12. Check cleanliness of surrounding areas.	Operator	
	13. Check accessories for damage or trouble.	Operator	
2. Periodic Inspections	1. HMI Periodic inspections shall be performed by the operator, maintenance engineer, or administrator under the presence of	CBO	
	2. Check operation of all lamps and switches 3. Check switch controls for proper indication or connection to instruments and gauges. 4. Check terminal blocks and power to		



the power of being global

AES
AES
Fired Thermal Power Plant

Page: 4 of 8
Rev.1
Procedure No:
MDII-OPN-SOP-

Title: CHS DUST SUPPRESSION SYSTEM Issue Date: 31/10/2019

ACTIVITY/TASK	ACTION	RESPONSIBLE	REMARK
representative of the owner, at least, every three months.	make sure they are operational. <ul style="list-style-type: none">• Check operation of the main controls on the control panel.• Check operation of the solenoid valve under no load to the control panel.		
2. Piping	<ul style="list-style-type: none">• Check distribution piping for damage or corrosion.• Check pipe connections for damage or corrosion.	Operator	
3. Valves and Instruments	<ul style="list-style-type: none">• Check state of pipe supports.• Check ball valves for damage or leakage.• Check fixing state of flow control valve and operation of auto drain valve.• Check operation of pressure reducing valve.	Operator	
4. Nozzle	<ul style="list-style-type: none">• Check connective movement of conveyor belt and spray of spray nozzles.• Check nozzles if they are sprayed in exact locations and directions.• Check nozzles for foreign materials and clean them on a regular basis.	Operator	
II. PLC REMOTE I/O CONNECTION WORK	<ul style="list-style-type: none">• PLC remote I/O for new added sampling system & dust suppression will be connected main PLC system.• Especially, PLC remote I/O connection works are needed to conveyor PLC system shut down.• If connections were correct then PLC CPU will be normal operation.• If connections were not correct then PLC CPU will be faulty operation.	Maintenance	
III. OPERATE SYSTEM 1. Auto mode	<ol style="list-style-type: none">1. Start sequence<ul style="list-style-type: none">• Step 1: Check and Open/ close valves at outside as attachment 1	Operator	Check pressure switch PS



the power of being global

AES
AES Mong Duong II Coal
Fired Thermal Power Plant

Page: 5 of 8

Rev.1

Procedure No:
MDII-OPN-SOP-

Title: CHS DUST SUPPRESSION SYSTEM Issue Date: 31/10/2019

AES	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 5 of 8	Rev.1
	Title: CHS DUST SUPPRESSION SYSTEM	Issue Date: 31/10/2019	

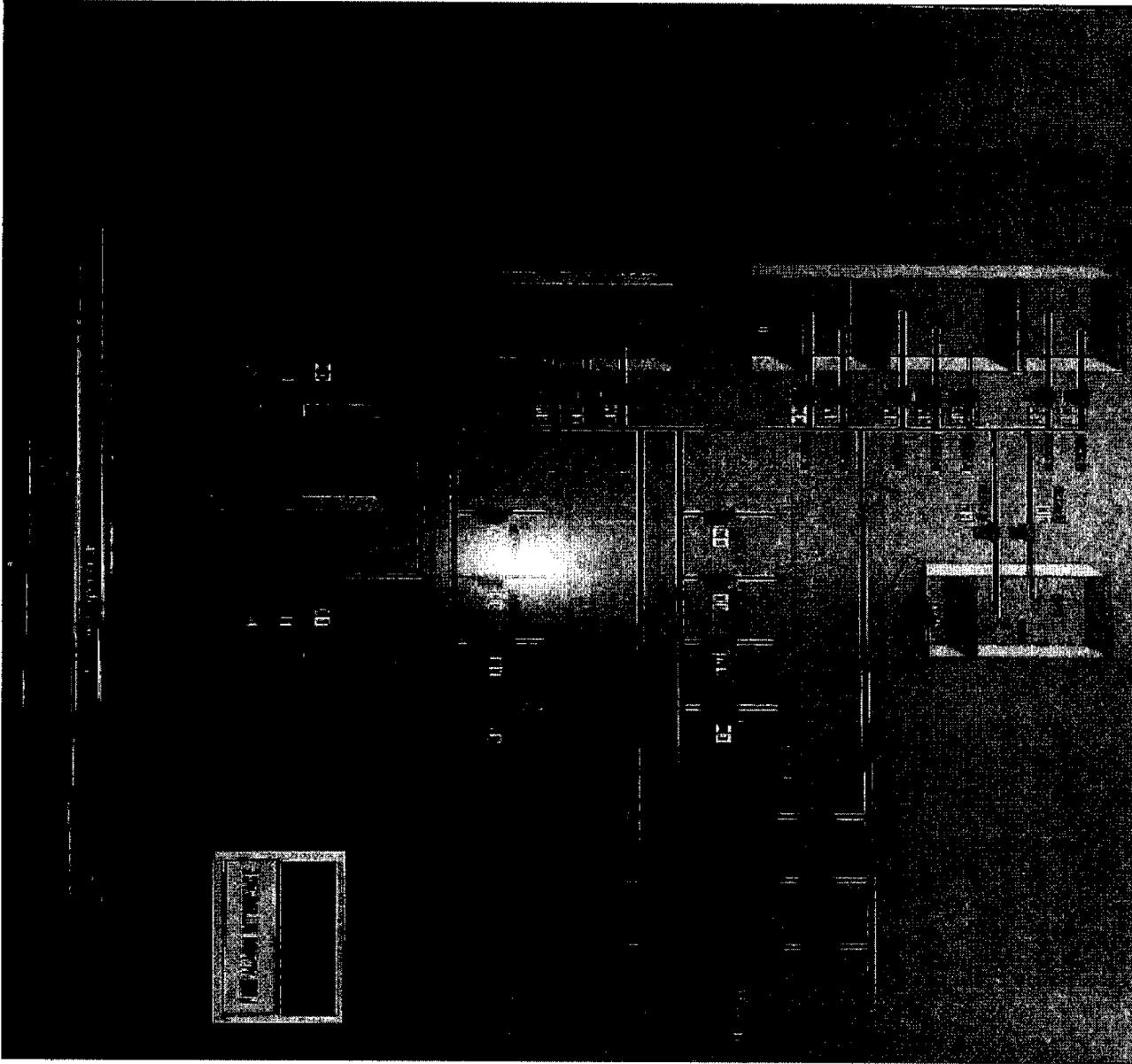
ACTIVITY/TASK	ACTION	RESPONSIBLE	REMARK
	<ul style="list-style-type: none">• Step 2: Select auto mode at local control panel• Step 3: Open solenoid valves on HMI as attachment 1 water spraying for :<ul style="list-style-type: none">+ tripper car+ reclaimer+ conveying transfer point.• Step 4: Run one coal pile spray pump AP101 or AP102. One pump is at standby status on HMI• Check status of pump and Check water level at nozzles	CBO	POGHD50CE 252 or PI POGHD68CP2 51
2. Stop sequence	<ul style="list-style-type: none">• Step 1: Stop coal pile spray pump on HMI• Step 2: close solenoid valves on HMI<ul style="list-style-type: none">• Note: coal pile spray pump will auto stop when enough pressure in pipeline	CBO	Check status of pump

Prepared by:

Approved by:

5. HMI CHART

 AES the power of being global!	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 6 of 8 Rev.1 Procedure No: MDII-OPN-SOP-
Title: CHS DUST SUPPRESSION SYSTEM		Issue Date: 31/10/2019



- Attachment 1 (in a case run pump AP101, pump AP102 is at standby status)



Title: CHS DUST SUPPRESSION SYSTEM Issue Date: 31/10/2019

No.	System Description	Service	Tag No.	Status
1.	Service water pump house	Isolation suction Valve	P0GHD68AA103	Open
2.		Isolation discharge valve	P0GHD68AA101	Open
3.		Return isolation valve	P0GHD68AA102	Open
4.	Water washing for each floor in Transfer tower TT01	Gate valve	P0GHD72AA101	Open
5.		Ball valves	P0GHD72AA116/112/111/106/105/101	Open
6.	Water washing for each floor in Transfer tower TT02	Gate valve	P0GHD75AA	Open
7.		Ball valves	P0GHD75AA107/106/105/...	Open
8.	Water washing for each floor in Transfer tower TT03	Ball valves	P0GHD73AA101/106	Open
9.	Water washing for each floor in Transfer tower TT04	Ball valves	P0GHD74AA101/106	Open
10.		Suction ball valve of water hose reel	P0GHD80AA	Open
11.	Water spraying for tripper car 01A	Ball valves	P0GHD80AA103/102/101	Open
12.		Gate valve	P0GHD72AA101	Open
13.		Solenoid valves	P0GHD77CE701/02/03/04	Open
14.		Gate valve	P0GHD75AA	Open
15.	Water spraying for tripper car 01B	Suction ball valve of water hose reel	P0GHD81AA	Open
16.		Ball valves	P0GHD81AA103/102/101	Open
17.		Solenoid valves	P0GHD80CE701/02/03/04	Open
18.	Water spraying for Reclaimer 01A	Ball valves	P0GHD83AA/AA101	Open
19.		Solenoid valves	P0GHD78CE701/02/03	Open
20.	water spraying for Reclaimer 01B	Ball valves	P0GHD82AA/AA101	Open
21.		Solenoid valves	P0GHD79CE701/02/03	Open
22.	Water spraying for conveying transfer point CV01A/B	Gate valve	P0GHD71AA101/ P0GHD72AA101	Open
23.		Ball valves	P0GHD71AA101/ P0GHD72AA102	Open
24.		Solenoid valves	P0GHD71CE701/02 & P0GHD72CE701/02	Open



the power of being global

AES	AES-VCM Mong Duong II Coal Fired Thermal Power Plant	Page: 8 of 8 Rev.1 Procedure No: MDII-OPN-SOP-
Title: CHS DUST SUPPRESSION SYSTEM		Issue Date: 31/10/2019

No.	System Description	Service	Tag No.	Status
25.	Water spraying for conveying transfer point CV02A/B (at TT01/02)	Gate valves	P0GHD72AA101/ P0GHD75AA?	Open
26.		Ball valves	P0GHD72AA107/ P0GHD75AA104	Open
27.		Solenoid valves	P0GHD72CE704/05/ P0GHD75CE702/03	Open
28.	Water spraying for conveying transfer point CV03A/B (at TT01/02)	Gate valves	P0GHD72AA101/ P0GHD75AA?	Open
29.		Ball valves	P0GHD72AA107/ P0GHD75AA104	Open
30.		Solenoid valves	P0GHD72CE703/ P0GHD75CE703	Open
31.	Water spraying for conveying transfer point CV04A/B	Ball valves	P0GHD73AA102/ P0GHD74AA102	Open
32.		Solenoid valves	P0GHD73CE701/ P0GHD74CE701	Open
33.		Gate valves	P0GHD72AA101	Open
34.	Water spraying for conveying transfer point CV05A/B (at TT01/03/04)	Ball valves	P0GHD72AA113/ P0GHD73AA102/ P0GHD74AA102	Open
35.		Solenoid valves	P0GHD72CE706/07 P0GHD73CE702/03 P0GHD74CE702/03	Open